



Launch Mission Execution Forecast

Mission: Falcon 9 GPS III-4

Issued: 4 Nov 20 / 0700L (1200Z)

Valid: 5 Nov 20 / 1824 – 1840L (2324 – 2340Z)



Forecast Discussion: A tight pressure gradient is being generated between the strong high-pressure area anchored over the north Atlantic and Tropical Storm Eta over Central America. This creates breezy, onshore flow along the Space Coast, with rain shower chances increasing over time. The primary weather concern for a Thursday evening launch attempt is Liftoff Winds and the Cumulus Cloud Rule associated with the showers.

On Friday, Tropical Storm Eta will likely move northward, adding moisture over the Spaceport while strengthening our winds. The primary weather concerns remain Liftoff Winds, and the Cumulus Cloud Rule, with the addition of the Thick Cloud Layer Rule

		Probability of Violating Weather Constraints					
Launch Day	40%	Primary Concerns: Liftoff Winds, Cumulus Cloud Rule					
	Weather Conditions				Additional Risk Criteria		
	Weather/Visibility: None / 7 mi.	Clouds				Upper-Level Wind Shear:	Moderate
		Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather:	Low
Temp/Humidity: 75°F / 72%	Stratocumulus	Scattered	2,500	7,000	Solar Activity:	Low	
Liftoff Winds (200'): 080° 20 - 25 mph	AltoCumulus	Scattered	10,000	12,000			
		Probability of Violating Weather Constraints					
24-Hour Delay	60%	Primary Concerns: Liftoff Winds, Cumulus Cloud Rule, Thick Cloud Layer Rule					
	Weather Conditions				Additional Risk Criteria		
	Weather/Visibility: Isold Showers / 7 mi.	Clouds				Upper-Level Wind Shear:	Moderate
		Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather:	Moderate
Temp/Humidity: 75°F / 72%	Cumulus	Scattered	2,500	10,000	Solar Activity:	Low	
Liftoff Winds (200'): 080° 22 - 27 mph	AltoCumulus	Broken	10,000	14,000			
<i>Note: The Probability of Violation (POV) is the chance that a Lightning Launch Commit Criteria (LLCC) or certain user constraints (surface winds, precipitation, and temperatures, etc.) will be violated during the launch window. It does not take into account upper-level wind shear, booster recovery weather, and solar activity.</i>							
Next Forecast Will Be Issued		As Required					